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EXAMINER

ABRAMS, NEIL

ART UNIT

PAPER NUMBER

2839

DATE MAILED: 06/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/208962

Applicant(s)

Examiner

Group Art Unit

2839

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

☒ Responsive to communication(s) filed on 2-26-03

☒ This action is **FINAL**.

- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

☒ Claim(s) 46-64 is/are pending in the application.

Of the above claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 46-64 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).

☐ All ☐ Some* ☐ None of the:

☐ Certified copies of the priority documents have been received.

☐ Certified copies of the priority documents have been received in Application No. _____.

☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

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The rejections of claims 46-64 under 35 U.S.C. 112 and related discussion in last office action are repeated and incorporated into this letter.

Just how the figs. 1, 2, 3 disclosures, to which these claims are believed to be directed are to be used in practice is unclear. In the response applicant in explaining the invention only refers to fig 1. The examiner also notes that features shown in fig 1-3 do not clearly relate to figs. 4-33 disclosures and these do not aid in understanding the figs. 1-3 embodiments. For figs 1-3 devices just how current is applied and signals transmitted is unclear. For claims 48-54, no teaching of figs. 1-3 device with "solder masses" is present. How claim 48 reads on any figure in the case should be explained. For claims 46, 54, 56, the disclosure is also lacking for failure to show the parts arranged in the manner now seen to be intended, as shown in last response, see figure on page 3. A figure like this was not present in the case as filed. Should the rejections under 35 U.S.C. 112 be overcome, such added figures would be required since all claimed features must be shown. For side-by-side limitations, sole support is spec. Page 6. Lines 1-3. This is not adequate for detailed claims now presented. Also claim 46 line 4, terms, "laterally spaced" lacks basis in disclosure as filed. This also applies to claims 51, 56. Note that in the page 3 figure the ground planes on right are not shown as laterally spaced from those on left.

The claims, as best understood are rejected below on prior art

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Claim 61 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Fedder.

For claim 61 the Fedder connector 12 (see fig 11) includes signal conductors 56 and ground planes 60 on each side of the signal conductors. See attached sketch. A virtual ground plane is not disclosed but it seems clear that one or more would exist between conductors 56 or to the sides of the housing. Alternatively it would have been obvious to design the connectors to have such ground planes since they only involve spacing the contacts far apart enough so as to prevent magnetic coupling between the contacts. Nor does the claim define over such virtual plane at or outwardly of the housing side walls. If crosstalk between contacts were present it would have been obvious to space them further apart and this would result in a ground plane or plane of ^{zero}~~zero~~ charge between contacts. The reference is also applied with connectors mated and with combined ground planes 60,110 separating the contacts..

Claims 46,47,51,52, 56,57 are rejected under 35USC (a) as being unpatentable over Fedder.

The above discussion of Fedder is applied in this rejection. It is well known to mount connectors side by side on a circuit board. It would have been obvious to so locate a pair of Fedder connectors 12. This enables many signals to be fed to the mother board. The connectors so mounted would have laterally spaced apart ground planes 60 or 60,110 and a virtual ground plane would exist between the connectors or to the side of some of the contacts 56. This arrangement would meet claim language.

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Claims 48-50, 53-55, 58-60 and 62-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fedder in view of Seidler, Swamy and Romine.

Fedder does not disclose solder mass use. Seidler Swamy and Romine disclose contacts with attached solder masses or balls. It would have been obvious to form Fedder contacts for surface mount with attached solder masses in view of these references. This would enable easier mounting to the pcb.

Response to arguments. See above discussions.

Claims 46, etc are still broadly drawn as to be readable on Fedder. Other rejections are withdrawn as cumulative. As to argument on page 4, see spec page 5, line 7. basis for terms "laterally spaced" if present should be pointed out. Note that figure in Remarks does not show lateral spacing for 13,13 or 15,15. Also a figure like this, but modified as necessary, should be submitted as a proposed figure for entry in the event claims pertinent to that figure are allowed.

Goodman is cited to show connectors mounted side by side on ^{a panel}~~pcircuit board~~ to be well known in the art.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to N. Abrams at telephone number 308-1729.

Abrams/ek
06/04/03


NEIL ABRAMS
EXAMINER
ART UNIT 322